

## REMARKS

In the Office Action mailed December 19, 2003, the Examiner:

- restricted the present application to only one of the two groups of claims under 35 U.S.C. 121;
- rejected claims 1, 6-11, 14 and 16 under 35 U.S.C. 102(b) as being anticipated by Edwards et al. (U.S. Patent No. 6,294,408, hereinafter Edwards);
- rejected claims 2, 12-15, 23 and 26 under 35 U.S.C. 103(a) as being unpatentable over Edwards as applied to claim 1; and
- rejected claim 3 under 35 U.S.C. 103(a) as being unpatentable over Edwards as applied to claims 1-2, and further in view of Caletka et al. (U.S. Patent No. 6,410,988, hereinafter Caletka).

With this response, the pending claims are claims 1-16 and 22-26.

### Restriction Requirements - 35 U.S.C. 121

In response to the restriction requirement, Applicant confirms the previous election, with traverse, of Group I, claims 1-16 and 22-26, for further prosecution. Applicant reserves the right to prosecute claims 17-21, in a continuation application. Early allowance of this application is respectfully requested.

### Claim Rejections - 35 U.S.C. 102(b)

Claim 1, as amended, recites an electronic package that comprises a substrate, an electronic device and a heat spreader having a lid and only two parallel sidewalls extending from the lid. Both the electronic device and the heat spreader are mounted on a surface of the substrate. In particular, each sidewall of the lid is attached along one edge of the substrate.

By contrast, Edwards does not disclose an electronic package comprising a heat spreader that has a lid and only two parallel sidewalls extending from the lid. Rather, Edwards discloses a package having a lid 20 with a male edge sealing member 44 (Figs. 1, 3, 6 and 7) that extends around the periphery of the lid 20. See Col. 6, lines 55-57. While only two sides of this sealing member are shown in the cross-sectional views of Edwards, the description of the lid and sealing member at Col. 6, lines 55-57 must be used in interpreting these views which necessarily do not show the other two sides of the sealing member. When so interpreted, Edwards discloses a package having a lid with a male edge sealing member on all four sides of the lid and does not anticipate or suggest Applicant's device which has a lid and only two parallel sidewalls. Therefore, claim 1 and its dependent claims 6-11, 14 and 16 are not anticipated by Edwards.

With respect to claim 22, the Examiner does not provide any reasons for its rejection. However, claim 22, as amended, is similar to claim 1 in that it recites a semiconductor package that comprises a substrate, a semiconductor device mounted on one surface of the substrate through a plurality of solder joints and a heat spreader having a lid and only two parallel sidewalls mounted on the same surface of the substrate. Therefore, claim 22 cannot be anticipated by Edwards.

Claim Rejections - 35 U.S.C. 103(a)

To reject claims in an application under 35 U.S.C. §103, the Examiner bears the initial burden of establishing a prima facie case of obviousness. *In re Bell*, 26 USPQ2d 1529, 1530 (Fed. Cir. 1993). In order to establish prima facie obviousness, the prior art, alone or in combination, must teach or suggest each and every limitation of the rejected claims. See *In re Vaeck*, 20 USPQ2d 1438 (Fed. Cir. 1991); *In re Royka and Martin* 180 USPQ 580 (C.C.P.A. 1974); and *In re Wilson* 165 USPQ 494 (C.C.P.A. 1970). The teaching or suggestion to make the claimed invention, as well as the reasonable expectation of success, must come from the prior art, not Applicant's disclosure. *In re Vaeck*, *Id.* For the reasons explained below, in the present application, neither Edwards nor Caletka teaches or suggests each limitation of the rejected claims. Therefore, Applicant respectfully traverses these rejections.

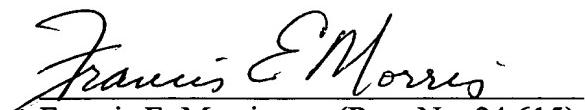
As discussed above, claim 1 or 22 as amended is directed to an electronic or semiconductor package including a heat spreader that has a lid and only two parallel sidewalls attached along two edges of a substrate, while the lid 20 in Fig. 3 of Edwards clearly does not teach or suggest such a limitation. Therefore, claims 2, 12-15, 23 and 26, which ultimately depend from either claim 1 or 22, are patentable over Edwards for at least the same reasons that claim 1 and 22 are patentable.

In addition, the thermally conductive member 22 of Caletka, as shown in Fig. 3, is essentially a plate that has no sidewalls and it can not remedy the deficiency of Edwards discussed above. Therefore, claim 3 is patentable over Edwards and in view of Caletka.

In view of the foregoing, Applicant believes that all of the claims are now in condition for allowance and respectfully requests the Examiner to pass the subject application to issue. If for any reason the Examiner believes any of the claims are not in condition for allowance, he is encourages to phone the undersigned attorney at (650) 849-7777 so that any remaining issues may be resolved. No additional fee is believed due for filing this response. However, if a fee is due, please charge such fee to Morgan, Lewis & Bockius LLP Deposit Account No. 50-0310.

Respectfully submitted,

Date: 3/19/2004

  
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